



UTAH DEPARTMENT *of*  
ENVIRONMENTAL QUALITY

**WATER  
QUALITY**

# Utah Water Quality Act, Title 19-5

Legislative Sunset Review, July 18, 2018

Erica Brown Gaddis, PhD, Director

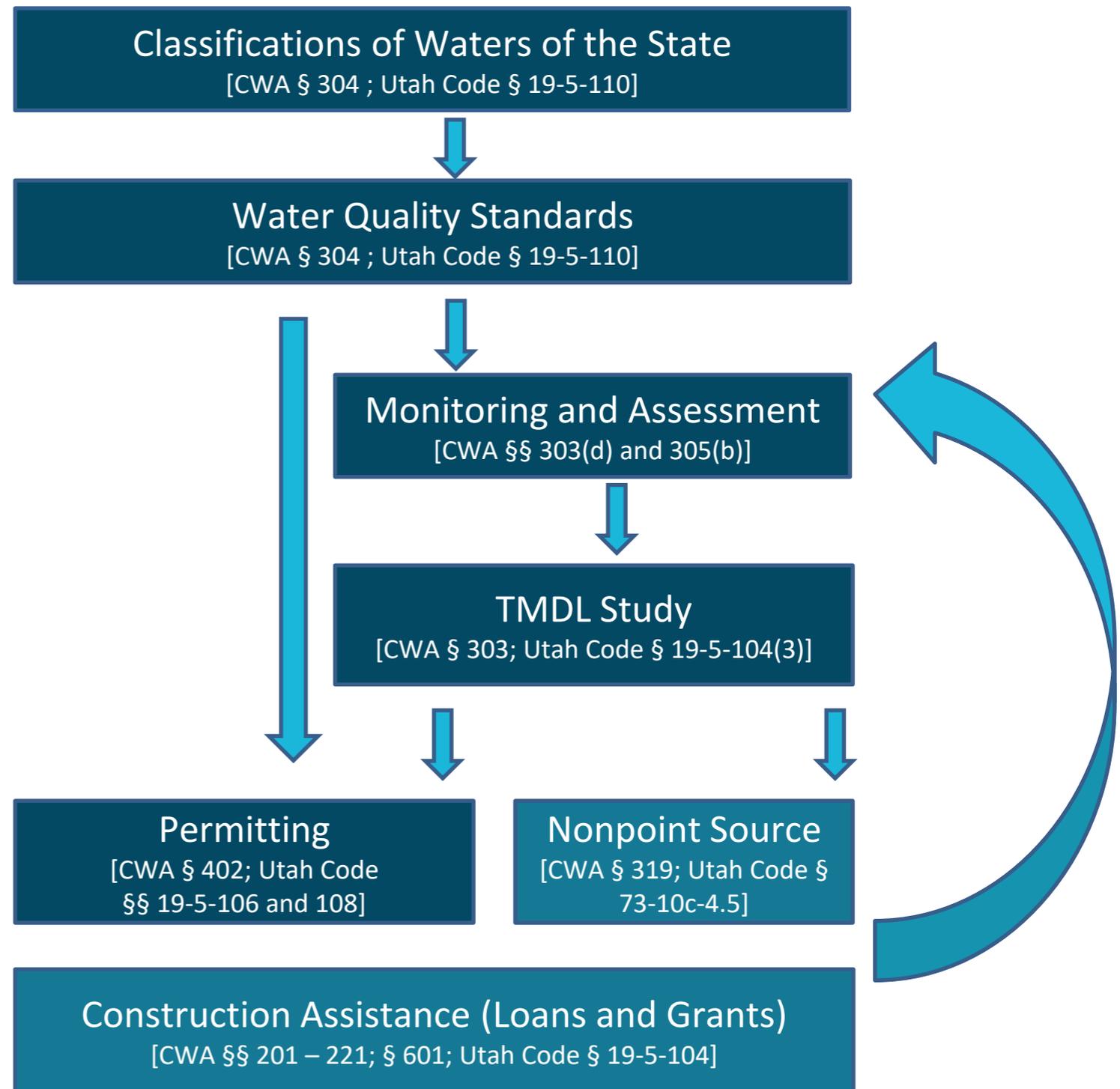
# Utah Water Quality Regulatory Framework

## DWQ Program Purpose

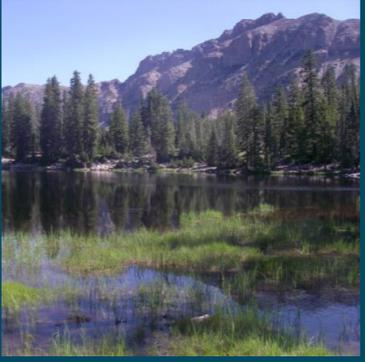
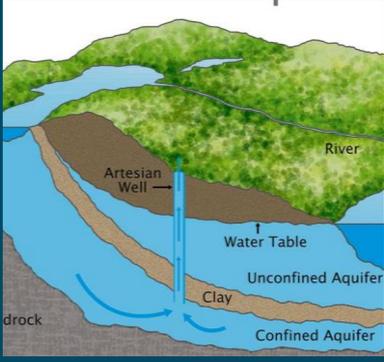
To protect, maintain and enhance the quality of Utah's surface and underground waters to protect beneficial uses and public health.

## Clean Water Act

Restore and Maintain the Chemical, Physical, and Biological Integrity of the Nation's Waters

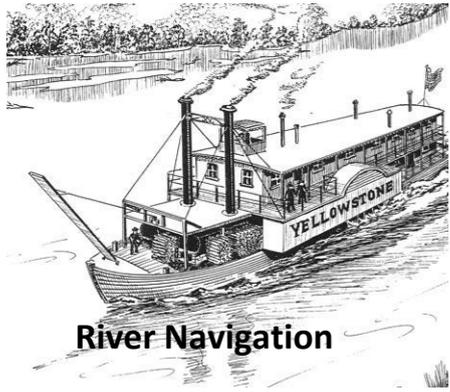


# Utah's Water Quality Program Authority

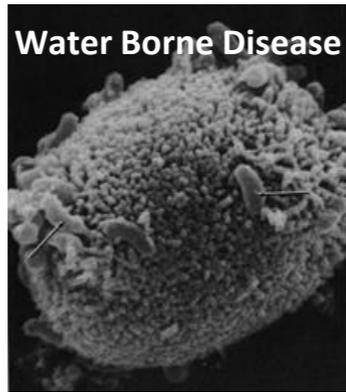
	Rivers and Streams	Lakes/Reservoirs	Wetlands	Ground Water
				
<b>Utah's Waters</b>	<b>14,250 perennial miles 171,760 total miles</b>	<b>1,552,078 acres</b>	<b>510,359 acres</b>	<b>Extensive aquifer systems</b>
<b>Standards</b>	 	 	 	
<b>Water Quality Assessment</b>				
<b>Total Maximum Daily Loads</b>	 	 	 	
<b>Discharge Permits</b>	 	 	 	
<b>Nonpoint Source</b>	 	 	 	
<b>WQ Certifications</b>	 	 	 	



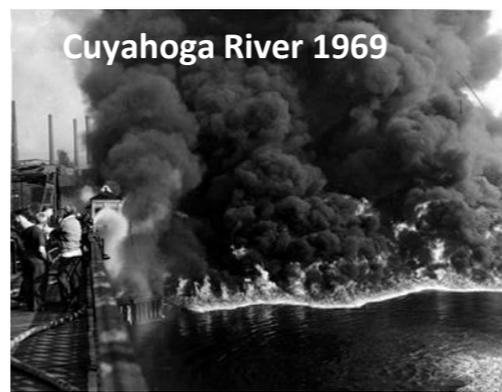
# Program History



River Navigation



Water Borne Disease



Cuyahoga River 1969



Fish Kills

River and Harbors Act

Federal Water Pollution Control Act

Federal Water Quality Act

Federal Clean Water Act

1899

1948

1965

1967

1972

1986

1991

1990s

2009

2019

Utah's first water quality regulations in health code

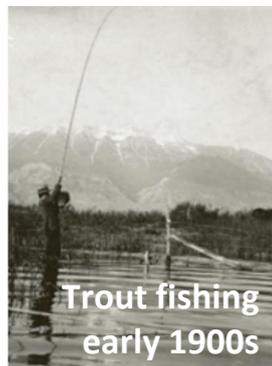
Utah delegated primacy of Clean Water Act Programs

Title 19-5 Utah Water Quality Act enacted

Implementing rules

Title 19-5 reauthorized

Title 19-5 sunsets



Trout fishing early 1900s



Utah Sewage Farms early 1900s



Mechanical Wastewater Treatment (1950s - 60s)



Water Recreation



Restoration of waters (Deer Creek)



Preserving quality of life for Utah's growing communities

# Summary of Utah's Clean Water Programs



## ➤ Permits

- 487 UPDES permits regulate the discharge of 110 billion gallons of treated municipal wastewater to Utah's waters
- 4,000+ storm water permits
- 50 ground water permits
- 100 operating permits
- 10 - 20/yr 401 WQ Certifications

## ➤ \$700 million loan funds to Utah's communities since 1983 supporting \$1.5 billion in infrastructure

- Moab WWTP
- Salem City WWTP
- Logan WWTP

## ➤ \$800,000/yr nonpoint source projects

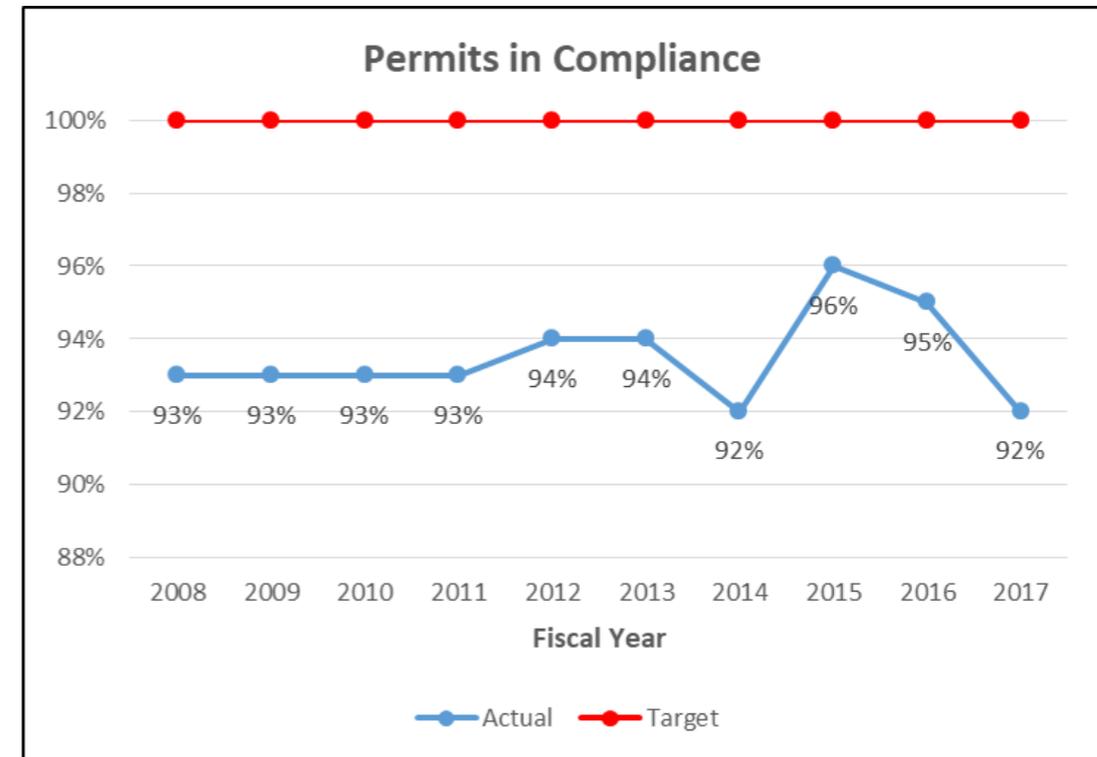
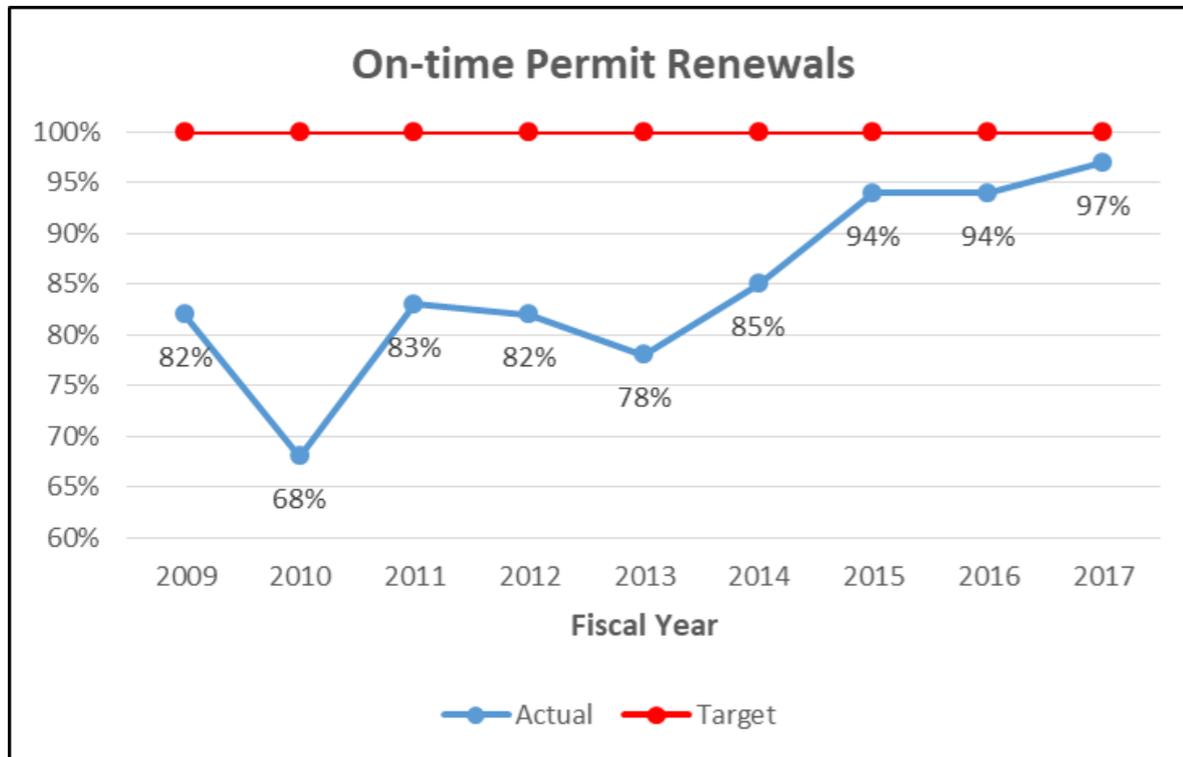
## ➤ 100 TMDLs and watershed plans

## ➤ 4,000 monitoring sites

## ➤ Respond to 50 – 100 incidents per year



# Permit performance metrics



# Spill Response

- 50 – 100 spills per year
- Over half are petroleum spills
- Large and complex spills
- FY17 – New FTE Spill Coordinator



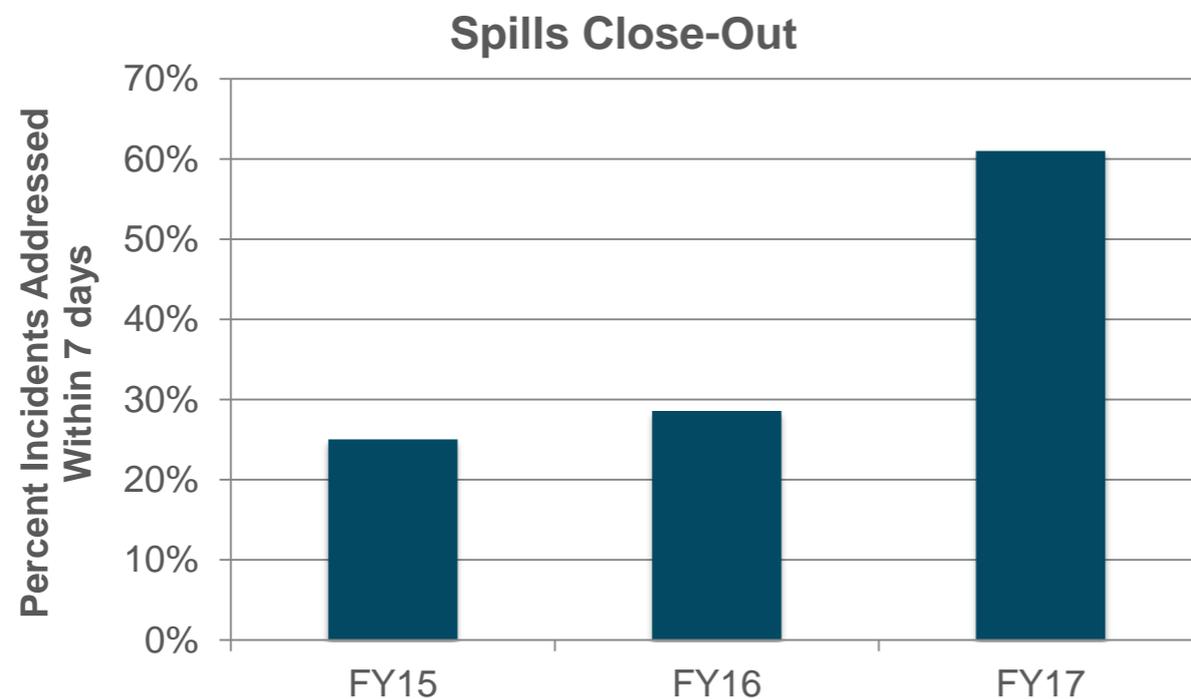
Price River Oil Spill 2018



Tibble Fork Sediment Release 2016



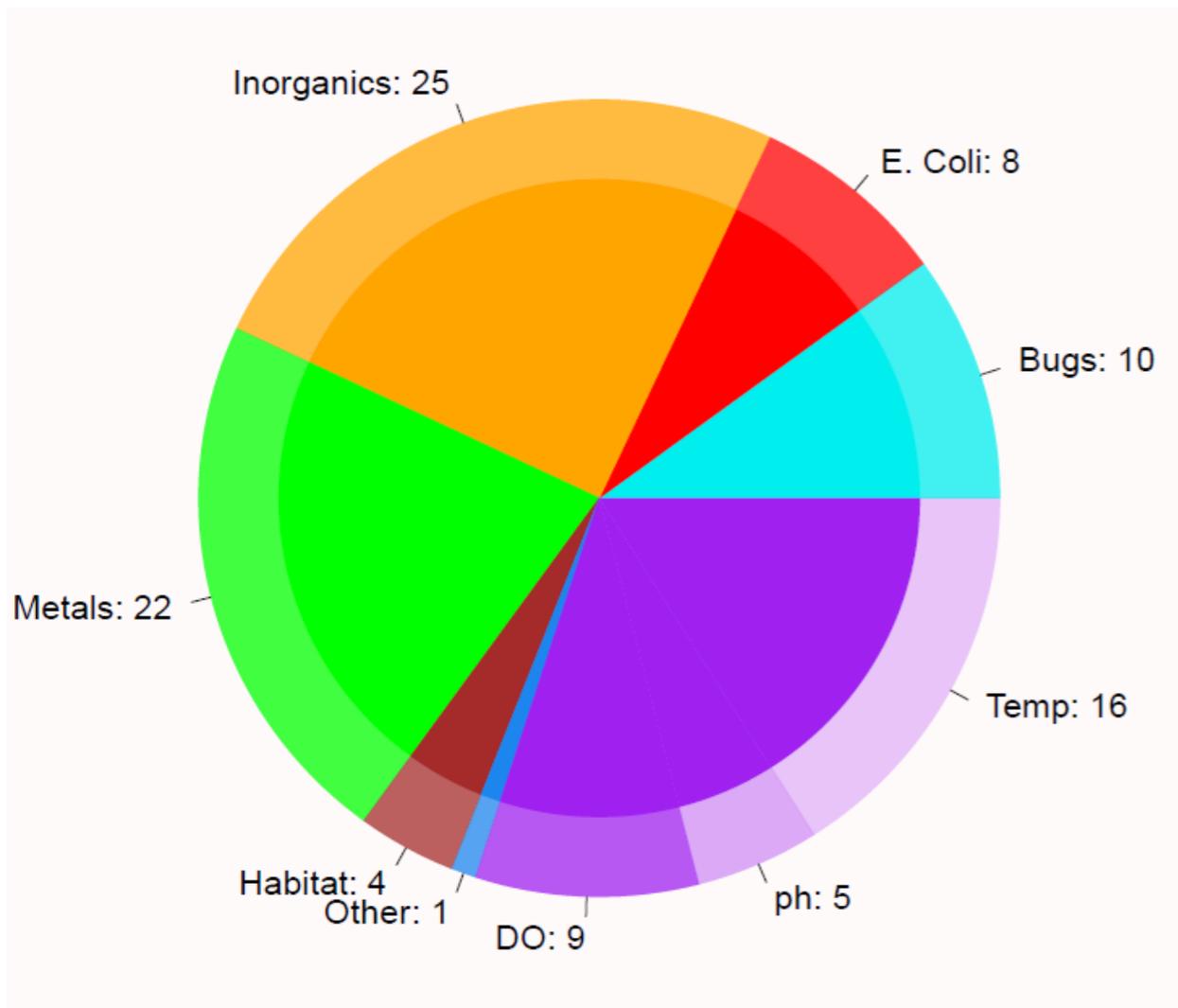
Gold King Mine Release 2015



# Water Quality Assessment (2016)

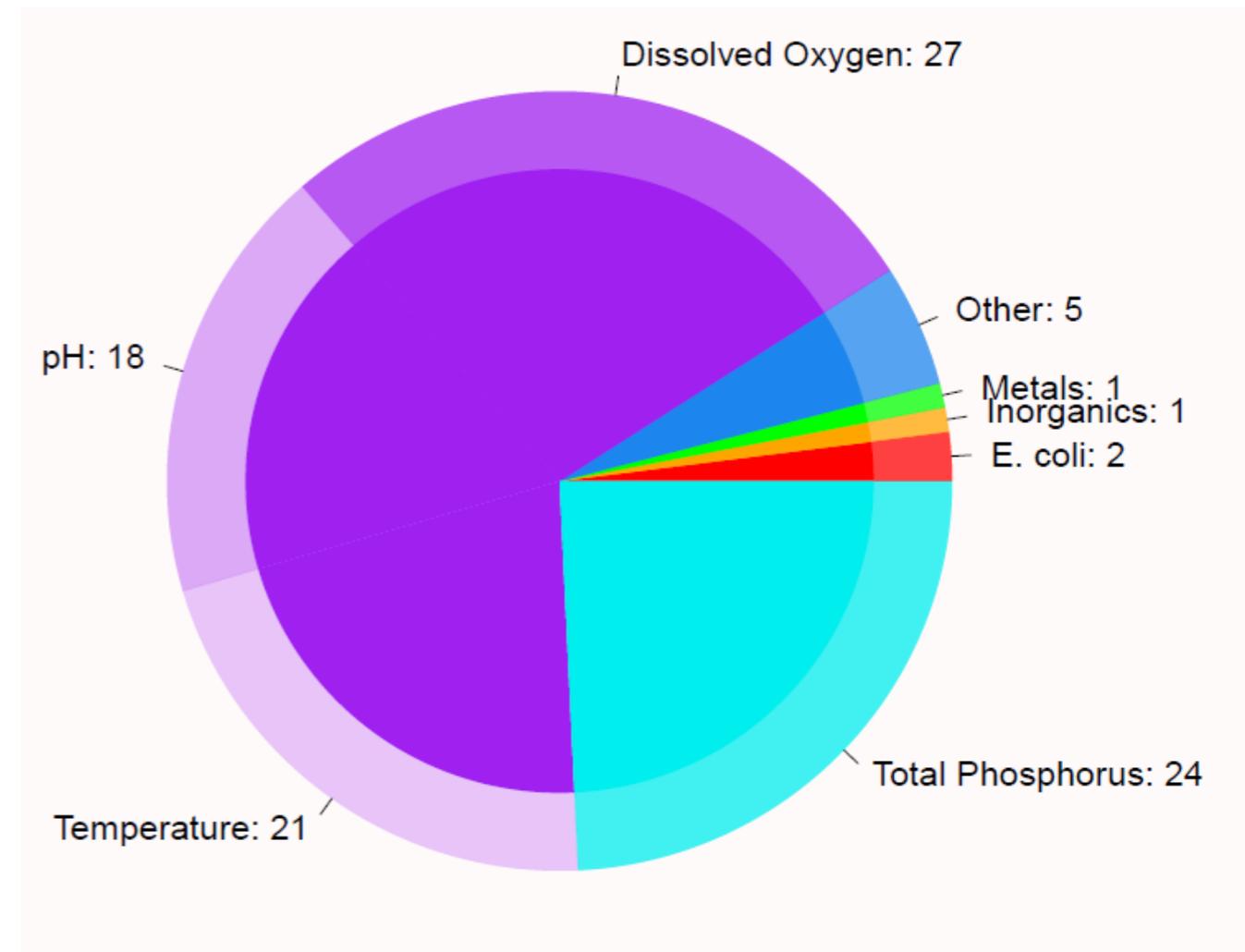
## Streams

43% stream miles impaired

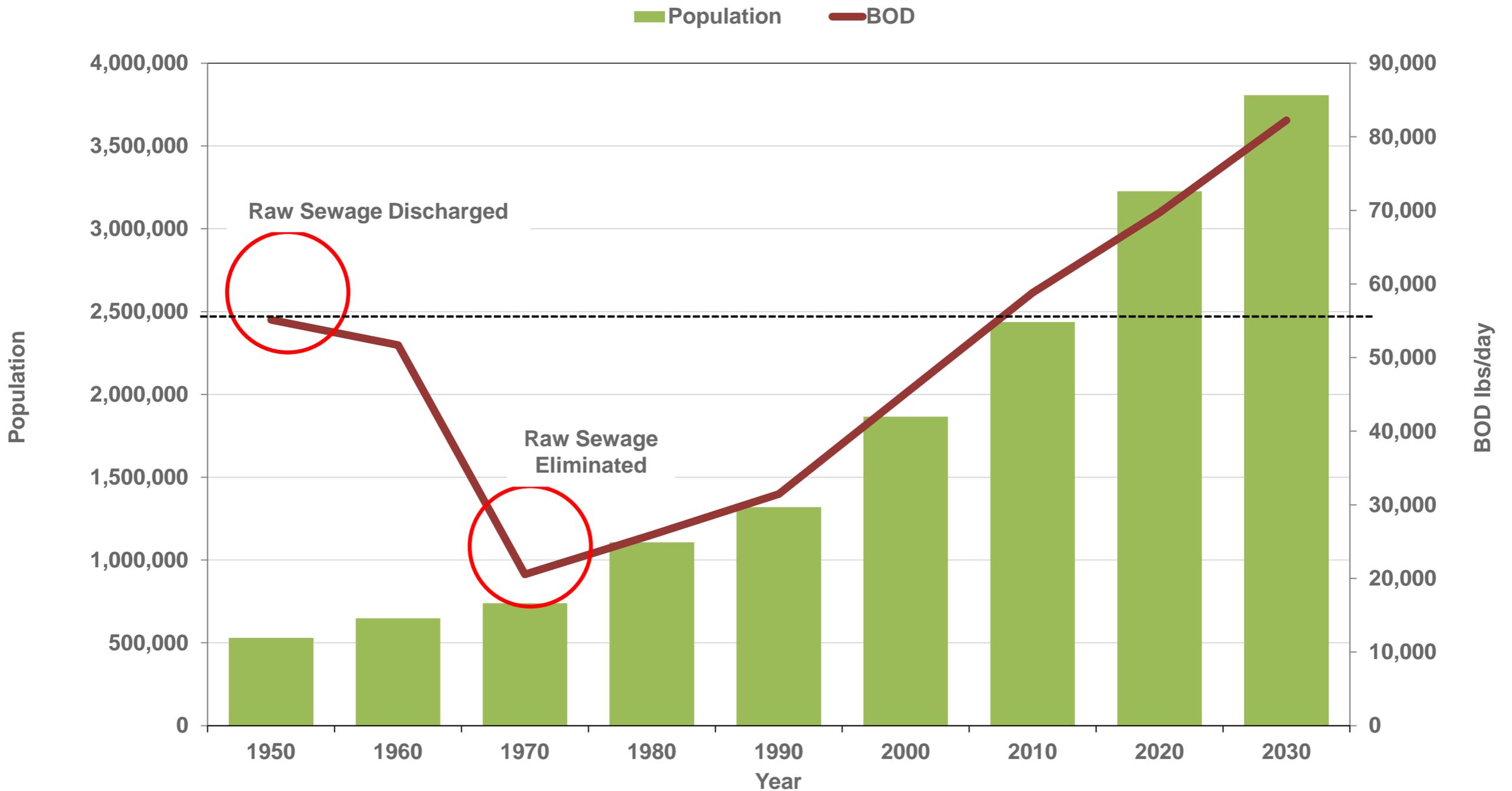


## Lakes

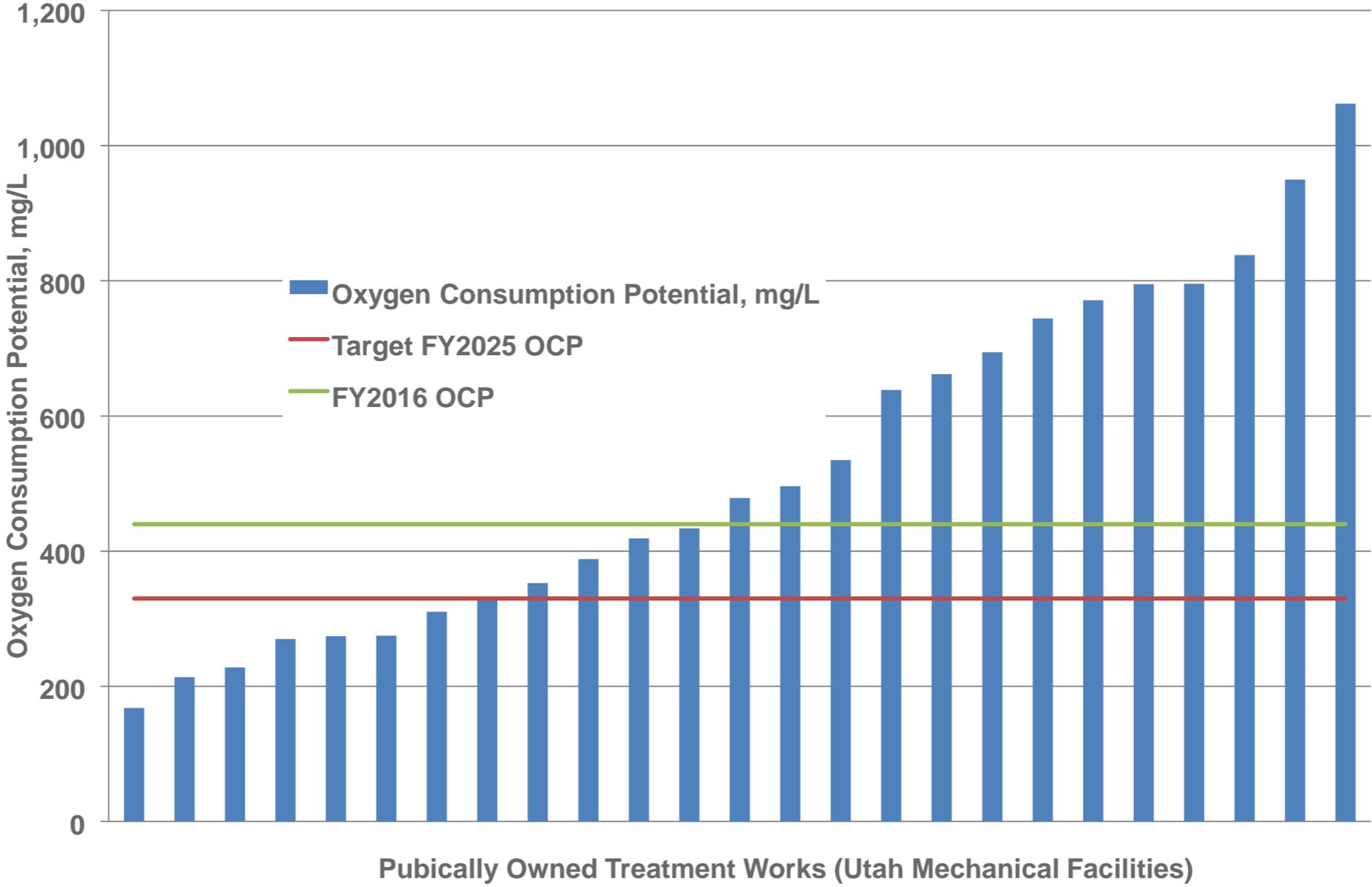
36% lake acres impaired



# Growth and Pollutant Loading



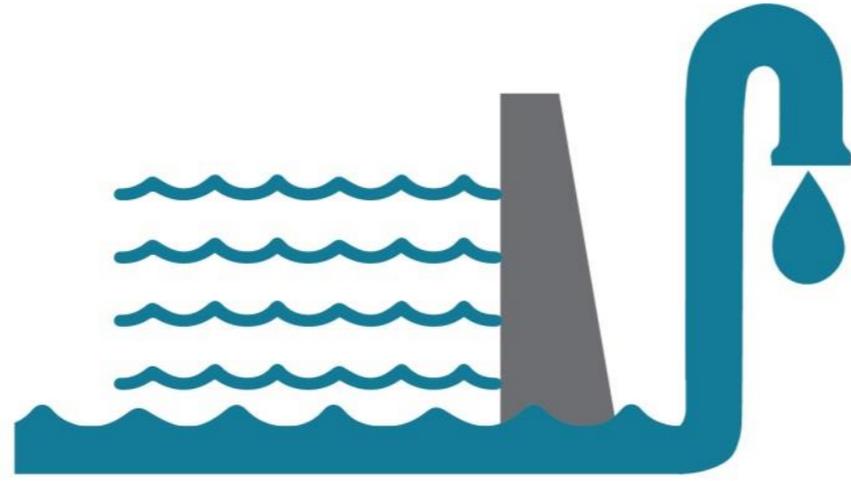
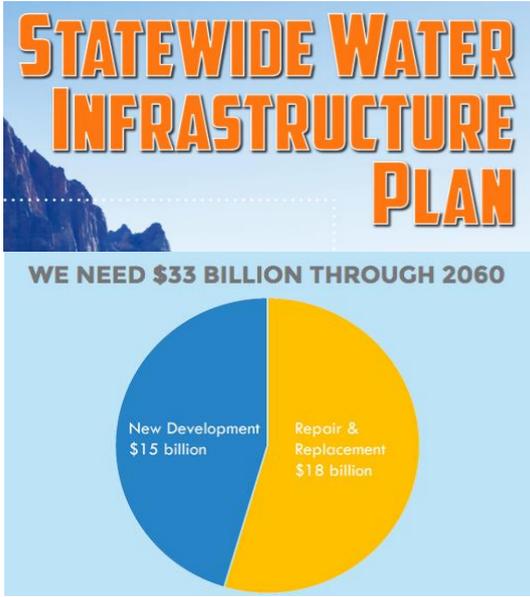
# Wastewater Treatment Plant Performance



Oxygen Consumption Potential integrates Biological Oxygen Demand (BOD), Ammonia, Nitrate + Nitrite, and Total Phosphorus



# Water Infrastructure



Drinking Water



Wastewater



Estimated \$2 - \$4 billion in sewer and wastewater over next 20 years

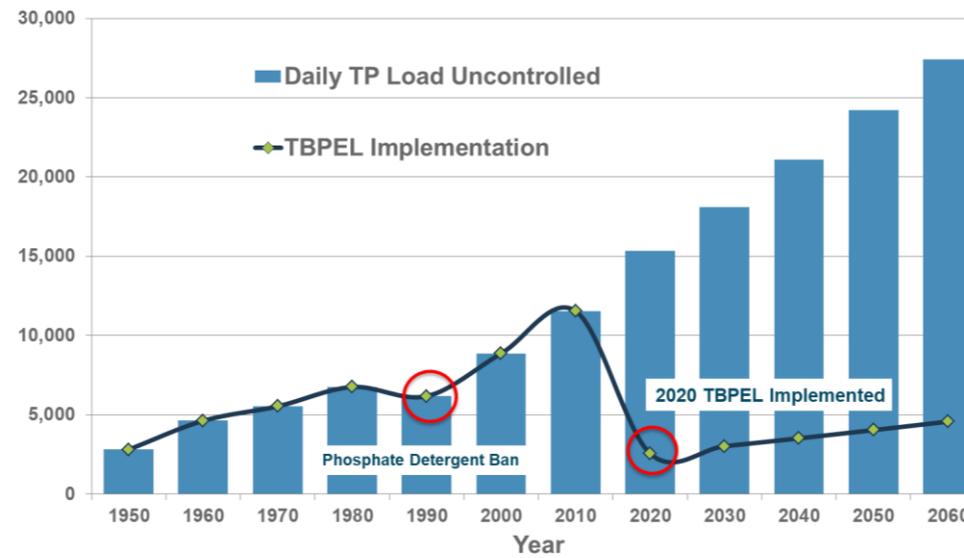


# Utah's Nutrient Strategy



Headwater Numeric  
Nutrient Criteria

Utah Phosphorus Loading to State Waters



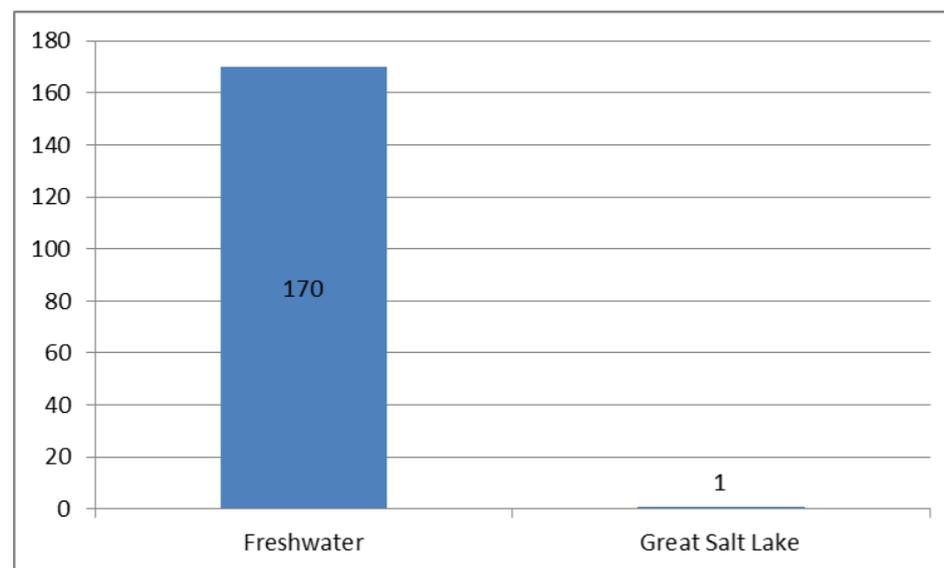
Hold the Line state-wide with  
Technology Based Phosphorus  
Effluent Limit



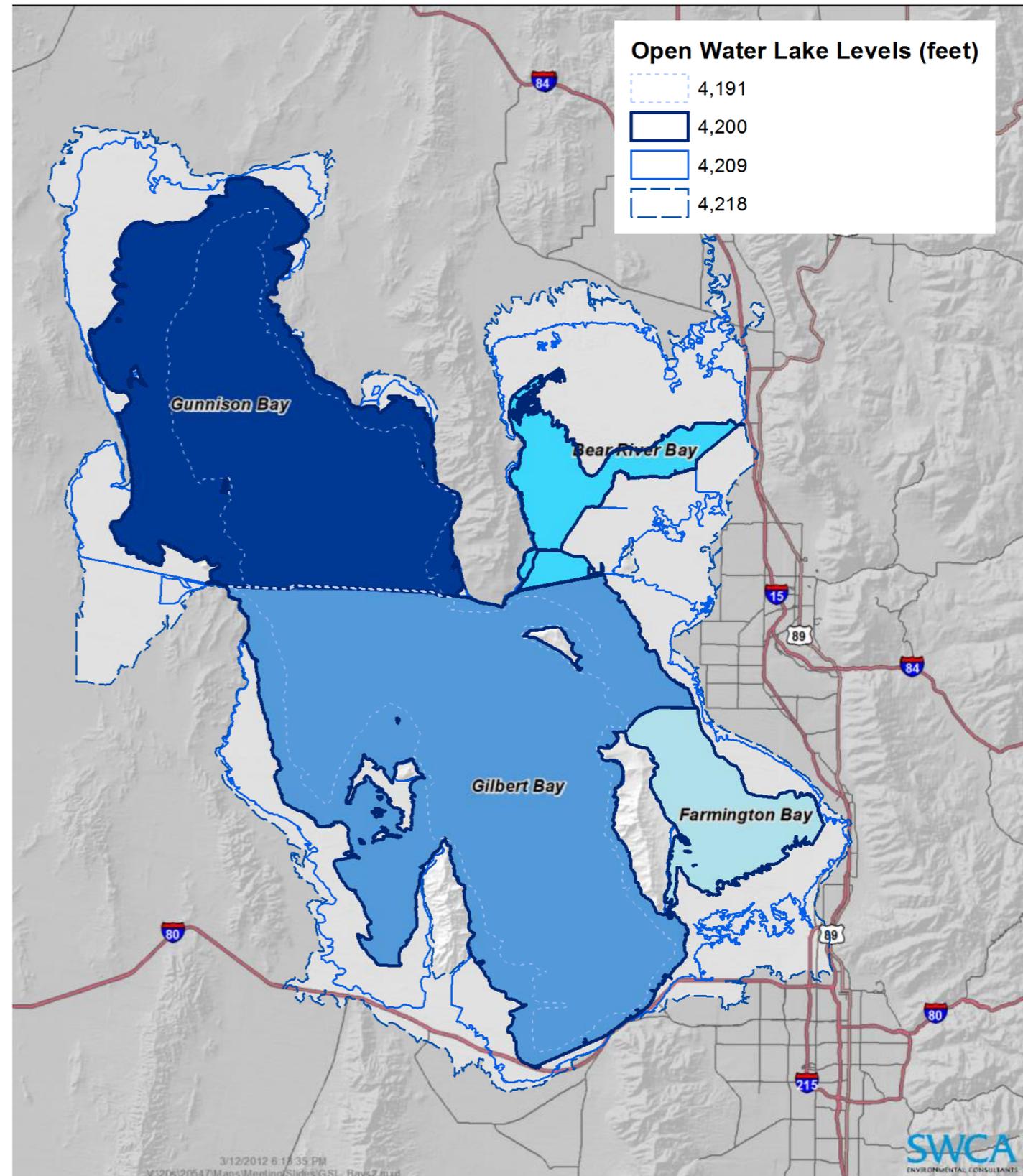
Develop site-specific nutrient  
standards for major waters

# Great Salt Lake

- Industrial contribution to Utah's economy of \$1.6 billion/yr
- Migratory flyway of hemispheric importance
- Ultimately receives 80% of Utah's wastewater
- Dramatic fluctuation and recent decline in lake level



Number of pollutants with WQ Standards

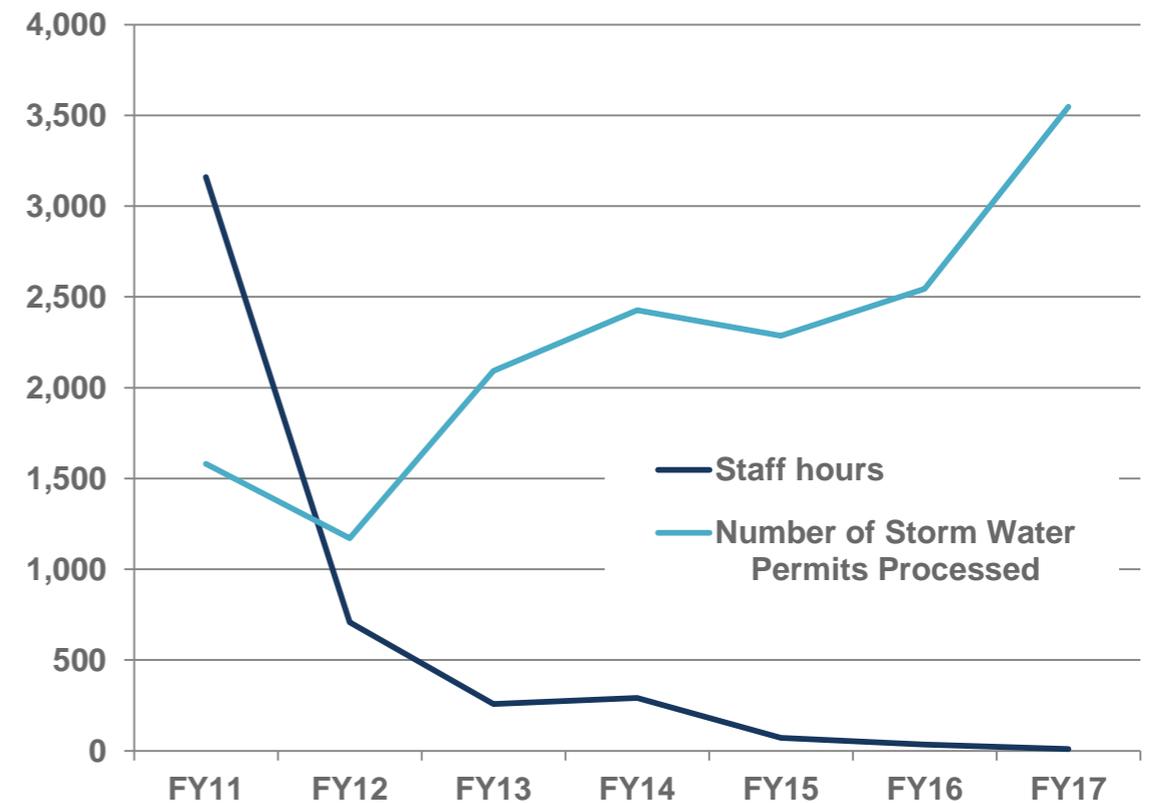


# Great Salt Lake Water Quality Strategy



# Storm Water Program

- Improved permit efficiency
- Promoting Low Impact Development
- Expand in-state inspection and compliance
- Integration with other programs
- Expanded outreach and training



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# Collaboration and Outreach

It is how we do business.....

## Commissions, Councils, and Workgroups

Utah Lake Commission

Jordan River Commission

Bear River Commission

Utah Conservation Commission

Great Salt Lake Advisory Council

Weber River Watershed Partnership

Western States Water Council

Great Salt Lake Advisory Council

Colorado Salinity Forum

Water Quality and Health Advisory Panel

Utah Lake Water Quality Study

Nutrient Core Team

AFO/CAFO Workgroup

Water Quality Task Force

Water Quality Standards Workgroup

Utah Storm Water Advisory Committee

Water Environment Association of Utah

## Active Partnerships

Local Health Departments

Municipalities and water districts

State Agencies

Federal Agencies

Industry Associations

Watershed groups

Elected officials



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# If Not Reauthorized

EPA becomes lead agency implementing Clean Water Act in Utah

Loss of state ground water protection program

Loss of Utah's commitment to its citizens to protect and restore waters of the State

Loss of state-led collaboration with local, state, federal, and private partners to find optimal solutions to Utah's water quality issues



**Recommend reauthorization of  
Utah Water Quality Act  
(Title 19-5) for 10 years (2029)**

